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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,331	02/28/2002	Ronald P. Cocchi	PD-200335	8511

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THE DIRECTV GROUP INC  
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EXAMINER

ZIA, SYED

ART UNIT PAPER NUMBER

2131

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/085,331	<b>Applicant(s)</b> COCCHI ET AL.	
	<b>Examiner</b> Syed Zia	<b>Art Unit</b> 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This office action is in response to application filed on February 28, 2002. Original application contained Claims 1-58. Therefore, Claims 1-58 are pending for further consideration.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen et al. (U. S. Patent 5,282,249), and further in view of Kocher (U.S. Patent 6,289,455).
2. Regarding Claim 1, Cohen teach and describe a system for controlling access to digital services comprising: (a) a control center configured to coordinate and provide digital services; (b) an uplink center configured to receive the digital services from the control center and transmit the digital services to a satellite (Fig. 1/1 Item 20); (c) the satellite configured to: (i) receive the digital services from the uplink center (Fig. 1/2 Item 22); (ii) process the digital services (Fig. 1/2 Item 22), and (iii) transmit the digital services to a subscriber receiver station (Fig. 1/2 Item 24); (d) the subscriber receiver station configured to: (i) receive the digital services

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from the satellite (Fig. 1/2 Item 26); (a) control access to the digital services through an integrated receiver/decoder IRD) (Fig. 1/2 Item 30); and (e) a conditional access module (CAM) communicatively coupled to the IRD (Fig. 1/2 Item 32), [col.4 line 12 to line 66],

Cohen do not disclose the CAM comprising nonvolatile protected memory component having state information to enforce desired functionality.

However, Kocher disclose the CAM (Fig.2 Item 225) comprising:

(i) a system bus; (ii) a plurality of physically separate and independently controlled nonvolatile memory components (col.21 line 13 to line 15), wherein access control to the digital services is distributed among the nonvolatile memory components (col. 21 line 2 to col. 22 line 25); and (iii) a microprocessor communicatively coupled to the nonvolatile memory components, wherein the microprocessor is configured to use state information in the nonvolatile memory components to provide desired functionality and enforce one or more security policies (i.e. regulating access) for accessing the digital services (col.10 line 5 to line 47, and col.5 line 55 to col.6 line 3).

Kocher is analogous art because it discusses a method and apparatus for preventing piracy of digital content including the use of a smart card.

Therefore, It would have been obvious to one ordinary skilled in the art at the time of invention to include the teachings and features of CAM found in Kocher in the smart card used by Cohen, to control access to the broadcast data, because Kocher's method of protected memory of monitored data by using state information would not only promote security structure in the system of Cohen during receiving and distributing digital content (Kocher: Fig.1, col.5 line 55 to line 56, and col.6 line 65 to line 67) but will also provide safeguards against attempt by unauthorized person to breach security of system.

3. Regarding Claim 12, Cohen teach and describe a method of controlling unauthorized access to digital services (Fig.1-2)

Cohen do not disclose access control comprising nonvolatile protected memory component having state information to enforce desired functionality.

However, Kocher disclose the access control (Fig.2 Item 225) comprising: distributing access to digital services among a plurality of physically separate and independently controlled nonvolatile memory components on a system bus (col.21 line 13 to line 15, and col. 21 line 2 to col. 22 line 25); and

communicatively coupling the plurality of nonvolatile memory components to a microprocessor, wherein the microprocessor is configured to use state information in the nonvolatile memory components to provide desired functionality and enforce one or more security policies (i.e. regulating access) for accessing the digital services (col.10 line 5 to line 47, and col.5 line 55 to col.6line 3).

Kocher is analogous art because it discusses a method and apparatus for preventing piracy of digital content including the use of a smart card.

Therefore, It would have been obvious to one ordinary skilled in the art at the time of invention to include the teachings and features of access control found in Kocher in the smart card used by Cohen, to control access to the broadcast data, because Kocher's method of protected memory of monitored data by using state information would not only promote security structure in the system of Cohen during receiving and distributing digital content (Kocher: Fig.1, col.5 line 55 to

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line 56, and col.6 line 65 to line 67) but will also provide safeguards against attempt by unauthorized person to breach security of system.

4. Regarding Claim 24, Cohen teach and describe a method of accessing digital services (Fig.1-2).

Cohen do not disclose access control comprising nonvolatile protected memory component having state information to enforce desired functionality.

However, Kocher disclose the access control (Fig.2 Item 225) comprising:

storing state information in a plurality of nonvolatile memory components, wherein the

plurality of nonvolatile memory components are physically separate and independently controlled (col.21 line 13 to line 15, and col. 21 line 2 to col. 22 line 25);

accessing digital services using the nonvolatile memory components wherein the state information is used to provide desired functionality and enforce one or more security policies (i.e. regulating access) for accessing the digital services (col.10 line 5 to line 47, and col.5 line 55 to col.6 line 3).

Kocher is analogous art because it discusses a method and apparatus for preventing piracy of digital content including the use of a smart card.

Therefore, It would have been obvious to one ordinary skilled in the art at the time of invention to include the teachings and features of access control found in Kocher in the smart card used by Cohen, to control access to the broadcast data, because Kocher's method of protected memory of monitored data by using state information would not only promote security structure in the

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system of Cohen during receiving and distributing digital content (Kocher: Fig.1, col.5 line 55 to line 56, and col.6 line 65 to line 67) but will also provide safeguards against attempt by unauthorized person to breach security of system..

5. Regarding Claim 35, Cohen teach and describe a system for controlling access to digital services (Fig1-2)

Cohen do not disclose the CAM comprising nonvolatile protected memory component having state information to enforce desired functionality.

However, Kocher teaches a method conditional access module (CAM) to digital services (Fig.2 Item 225) comprising: (i) a system bus; (ii) a plurality of physically separate and independently controlled nonvolatile memory components (col.21 line 13 to line 15), wherein access control to the digital services is distributed among the nonvolatile memory components (col. 21 line 2 to col. 22 line 25); and (iii) a microprocessor communicatively coupled to the nonvolatile memory components, wherein the microprocessor is configured to use state information in the nonvolatile memory components to provide desired functionality and enforce one or more security policies (i.e. regulating access) for accessing the digital services (col.10 line 5 to line 47, and col.5 line 55 to col.6line 3).

Kocher is analogous art because it discusses a method and apparatus for preventing piracy of digital content including the use of a smart card.

Therefore, It would have been obvious to one ordinary skilled in the art at the time of invention to include the teachings and features of CAM found in Kocher in the smart card used by Cohen, to control access to the broadcast data, because Kocher's method of protected memory of

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monitored data by using state information would not only promote security structure in the system of Cohen during receiving and distributing digital content (Kocher: Fig.1, col.5 line 55 to line 56, and col.6 line 65 to line 67) but will also provide safeguards against attempt by unauthorized person to breach security of system.

6. Regarding Claim 47, Cohen teach and describe an article of manufacture for preventing unauthorized access to digital services (Fig.1-2).

Cohen do not disclose access control comprising nonvolatile protected memory component having state information to enforce desired functionality.

However, Kocher disclose the access control (Fig.2 Item 225) comprising:

means for distributing access control to digital services among a plurality of physically

separate and independently controlled nonvolatile memory components on a system bus (col.21 line 13 to line 15, and col. 21 line 2 to col. 22 line 25); and

means for communicatively coupling the plurality of nonvolatile memory components to a microprocessor, wherein the microprocessor is configured to use state information in the nonvolatile memory components to provide desired functionality and enforce one or more security policies (i.e. regulating access) for accessing the digital services (col.10 line 5 to line 47, and col.5 line 55 to col.6 line 3).

Kocher is analogous art because it discusses a method and apparatus for preventing piracy of digital content including the use of a smart card.



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Therefore, It would have been obvious to one ordinary skilled in the art at the time of invention to include the teachings and features of access control found in Kocher in the smart card used by Cohen, to control access to the broadcast data, because Kocher's method of protected memory of monitored data by using state information would not only promote security structure in the system of Cohen during receiving and distributing digital content (Kocher: Fig.1, col.5 line 55 to line 56, and col.6 line 65 to line 67) but will also provide safeguards against attempt by unauthorized person to breach security of system.

8. Claims 2-11, 13-23, 25-34, 36-47, and 48-58 are rejected applied as above rejecting Claim 1, 12, 24, 35, and 47. Furthermore, system of Cohen and Kocher teaches and describes a system and method for controlling access to digital services, wherein:

As per Claims 2,13, 25, 36, and 48, the conditional access module is a smart card (Cohen: Fig.1/1 Item 16, and Kocher Fig.2 Item 225).

As per Claim 3, 14, 37, and 49, the smart card further comprises: a volatile memory component; a custom logic block; and a system input/output module.

As per Claim 15, 26, 38, and 50, the smart card is utilized in an integrated receiver/decoder (IRD) (Cohen: Fig. 1/2 Item 30, and Kocher Fig.2 Item 225).

As per Claim 27, a single microprocessor controls the nonvolatile memory components (Kocher: col.9 line 29 to line 40).

As per Claim 4, 16, 28, 39, and 51, each nonvolatile memory component has separate memory access control restrictions (Kocher: col.24 line 10 to line 30).

As per Claim 5, 17, 29, 40, and 52, each nonvolatile memory component implements an entirely unique memory access control logic (Kocher: col.23 line 36 to line 48).

As per Claim 6, 18, 30, 41, and 53, the plurality of nonvolatile memory components reside on a single chip.

As per Claim 7, 19, 42, and 54, a charge pump is shared between the plurality of nonvolatile memory components (col. 21 line 2 to col. 22 line 25).

As per Claim 8, 20, 31, 43, and 55, programming control is shared between the plurality of nonvolatile memory components (col. 21 line 2 to col. 22 line 25).

As per Claim 9, 21, 32, 44, and 56, the plurality of nonvolatile memory components employ separate and unique address ranges (Kocher: col.27 line 25 to line 39).

As per Claim 10, 22, 33, 45, and 57, the plurality of nonvolatile memory components employ a single contiguous address range (Kocher: col.27 line 25 to line 39).

As per Claim 11, 23, 34, 46, and 58, separate access control units satisfy a functional requirement of each nonvolatile memory component (Kocher: col.10 line 5 to line 47, and col.5 line 55 to col.6 line 3).

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1, 12, 24, 35, and 47 of instant application 10085331 (hereafter '331) are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 8, 15, and 22 of copending Application No. 10085920 (hereafter '920). Although the conflicting claims are not identical, they are not patentably distinct from each other because in view of the obviousness type double patenting rationale enunciated in **Georgia-Pacific Corp. v. United States Gypsum Co.**, 195 F.3d 1322, 1326, 52 USPQ2d 1590, 1593 (Fed. Cir. 1999), the instant application's above mentioned claims merely define a system for controlling access to digital services where protected memory and microprocessor (device) share the control for access right management which is a obvious variation of access rights to digital services based charge pump and programming control of the invention as claimed in copending application '920.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SZ

November 28, 2005